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2284-63

Copy 2 of 7

1 March 1963

MEMORANDUM FOR : Acting Deputy Director (Research)

SUBJECT : ALQ-49 Problem Area

25X1A2g

REFERENCE : Memo for D/NRO from DD/R, Dated 10 January 1963;
Subject: "Use of ECM in U-2 Aircraft" 2055-63)

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1. As a follow-up to our discussion 27 February with [REDACTED] in the OSA Conference Room relative to the status of the ALQ-49, I thought you might be interested in the following observations made by Kelly Johnson the morning of 28 February when we were talking about the recent generator failure problem:

a. Kelly contends that had we been required to use Articles 358 or 359 in the recent past when they were equipped with the faulty generator, and had we on such flights activated the 49 and 51 together, the generator would have gone completely sour because the added amperage load of these sets working simultaneously when combined with the rest of the aircraft's system in operation exceeds by a fair margin the amperage available on the generator we are in the process of now replacing.

b. According to Kelly, at the present time the U-2, minus these systems, draws from 135 to 140 amps. in operation; 190 amps. is currently available at altitude. In addition, Kelly's so-called "cooling kit" (which is simply a provision for more ramair to cool the generator) installed on 358 and 359 permits some modest increment above 190 amps. to be available, but it seems to me that there is a question whether we will end up with a sufficient pad to adequately power both sets should they be turned on simultaneously.

25X1A2g

2284-63

Page 2

25X1A5a2

2. I told Kelly that I thought we needed to keep attempting to increase the capability of the generator by any means available, including the acquisition of a backup system if necessary. [REDACTED] in Kelly's plant told me 27 February that he is actively investigating a [REDACTED] generator manufactured in the [REDACTED] which may be able to achieve 290 amps. performance at altitude.

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25X1A9a

3. I have asked [REDACTED] to look into the whole question of power demands on the U-2 occasioned by the proliferation of electronics equipment that seems to be finding its way into the bird. He is visiting [REDACTED] 1 March and will discuss this with that group.

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25X1A9a

[REDACTED]
Acting Assistant Director
(Special Activities)

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